

March 9, 1992

PRELIMINARY ASSESSMENT REPORT

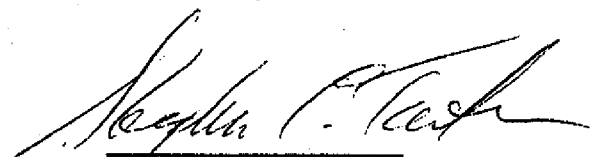
Wasley Products, Inc.
Plainville, Connecticut
CERCLIS No. CTD000844373

INTRODUCTION

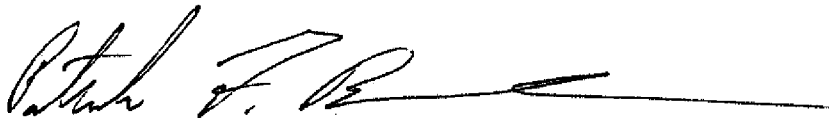
The following Preliminary Assessment (PA) complies with the requirements set forth under the EPA Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended. The PA represents the first step in a site screening process set forth by the National Contingency Plan (NCP). It does not necessarily fulfill the requirements of other State and Federal Regulations, such as RCRA. This work is being completed under Connecticut's Multi-Site Cooperative Agreement (MSCA) with EPA.

A perimeter survey was conducted at Wasley Products, Inc., 87 Spring Lane, Plainville, Connecticut on April 25, 1991 by Stephen Tartaris with the assistance of Valerie Pavan, Gabrielle Caloustian, and Raymond Frigon all of the CT DEP. The weather was clear and sunny with a temperature of approximately 65°. The survey was conducted in accordance with EPA's Preliminary Assessment Policy Paper.

Submitted by:



Stephen C. Tartaris
Environmental Analyst
Waste Management Bureau
Site Remediation & Closure Division



Patrick F. Bowe
Supervising Environmental Analyst
Waste Management Bureau
Site Remediation & Closure Division

BACKGROUND

Approximately thirty-one (31) industrial sites exist within and adjacent to the Farmington Industrial Park (FIP) located in Farmington and Plainville, Connecticut (III.1, VIII). Twenty-six (26) of these facilities are within the FIP. Five (5) are located to the northeast and adjacent to the FIP. For the purposes of this assessment report, these facilities will be referred to as being located within the Farmington Industrial Park area (FIP area) (Figure 1).

The four Unionville Water Company wells (FIP wells) and the two Plainville Water Company wells (Johnson Avenue Wells) located within the FIP area are contaminated by chlorinated solvents (VI.2, IX.2.3). The predominant types of chlorinated compounds detected in the groundwater are tetrachloroethylene, trichloroethylene, 1,1,1-trichloroethane, and chloroform. The wells are known to have been impacted since 1975 (I.1.a). Many industries have operated or currently operate in the FIP area that may have been involved in the release of these chlorinated solvents.

NUS Corporation (NUS), a U.S. Environmental Protection Agency (EPA) contractor, recently completed Screening Site Inspections (SSI) under CERCLA at sixteen (16) industrial sites within the FIP area. At the time NUS was conducting the SSIs, other industrial sites in the FIP area were being evaluated as potential hazardous waste disposal sites. This site discovery effort by NUS included a perimeter survey of the area on March 8, 1989 and a review of information on file at the Connecticut Department of Environmental Protection (DEP).

As a result of the site discovery effort by NUS and further evaluation by DEP staff, ten (10) additional potential hazardous waste disposal sites have been identified in the FIP area (see Table 1). These ten (10) sites have been entered into the federal superfund database (CERCLIS) and are subject to the federal pre-remedial review process. Preliminary Assessments (PA) are being conducted at each site by the DEP. Wasley Products, Inc. is one of the sites being evaluated.

SITE DESCRIPTION

The Wasley Products, Inc. ("Wasley") site is generally flat with small areas of lawn to the east and south. A paved driveway with parking is located on the north west and south sides of the building. A small wooded ridge separates the Wasley property from the housing development to the west. A drainage ditch traverses the property from north to south along Spring Lane.

The facility is a one story brick and concrete block building consisting of approximately 53,800 square feet (VII.1). It lies in the Farmington River Valley and is bounded to the north by the former Omega Corporation (presently an empty building), to the east by Spring Lane, to the south by Hygrade Tool & Manufacturing Co., Inc. (presently an undeveloped lot), and to the west by Shepard Lane. The area is zoned Restricted Industrial. There are no barriers to prevent access to the property (VIII). The surrounding area is primarily industrial with some residential and commercial.

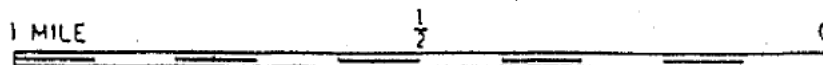
SITE HISTORY/ACTIVITY

Wasley is located at 87 Spring Lane in the Farmington Industrial Park in Plainville, Connecticut. The company is located at latitude N 41° 41' 44", longitude W 72° 52' 14" (V.9). The site is comprised of 2 parcels containing a total of approximately 7.9 acres. It is currently owned by Wasley Products, Inc.. The company has been at its present location since 1964. Prior to 1964 the site was undeveloped. The following information presents the ownership history of the Wasley property, as recorded in the Plainville Land Records:

Facility names corresponding to numbers can be found on Table 1



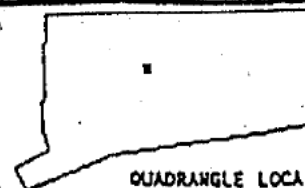
BASE MAP IS A PORTION OF THE FOLLOWING 7.5' U.S.G.S. QUADRANGLES:
NEW BRITAIN, CT. 1966, PHOTOREVISED 1984; BRISTOL, CT. 1966, PHOTOREVISED 1984.



FACILITIES WITHIN THE FARMINGTON INDUSTRIAL
PARK AREA

Wasley Products, Inc. (#10)

FARMINGTON/PLAINVILLE/CONNECTICUT



QUADRANGLE LOCATION

FIGURE 1

TABLE 1

Facilities Within the Farmington Industrial Park Area
as depicted in Figure 1

<u>NO.</u>	<u>COMPANY</u>	<u>CERCLIS NO.</u>
1.	Apex Machine Tool Company, Inc.	CID983876228
2.	B & L Tool and Machine Company	CID001150424
3.	Bauer Aerospace, Inc.	CID055506323
4.	Beekley Corporation/Biopolymers, Inc.	CID982547408
5.	Dayon Manufacturing, Inc.	CID980671580
6.	Electronic Coil Corporation	CID983876244
7.	J. F. Frederick Tool Co., Inc.	CID983876251
8.	Omega Corporation	CID983876269
9.	Trumpf Industries, Inc.	CID983874330
10.	Wasley Products, Inc.	CID000844373

<u>Parcel 1</u>	<u>Owner</u>	<u>Dates</u>
5.9 Acres	Irving and Stanley D. Fisher	unknown-1959
	Oscar J. and Gunhild M. Nelson	1959-1964
	F.I.P. Corporation	1964-1972
	Founders Realty Corporation	1972-1974
	Wasley Products, Inc.	1974-Present
 <u>Parcel 2</u>		
2.05 Acres	Shirley N. Abel	1967-1972 (inherited)
	F.I.P. Corporation	1972
	Founders Realty Corporation	1972-1974
	Wasley Products, Inc.	1974-Present

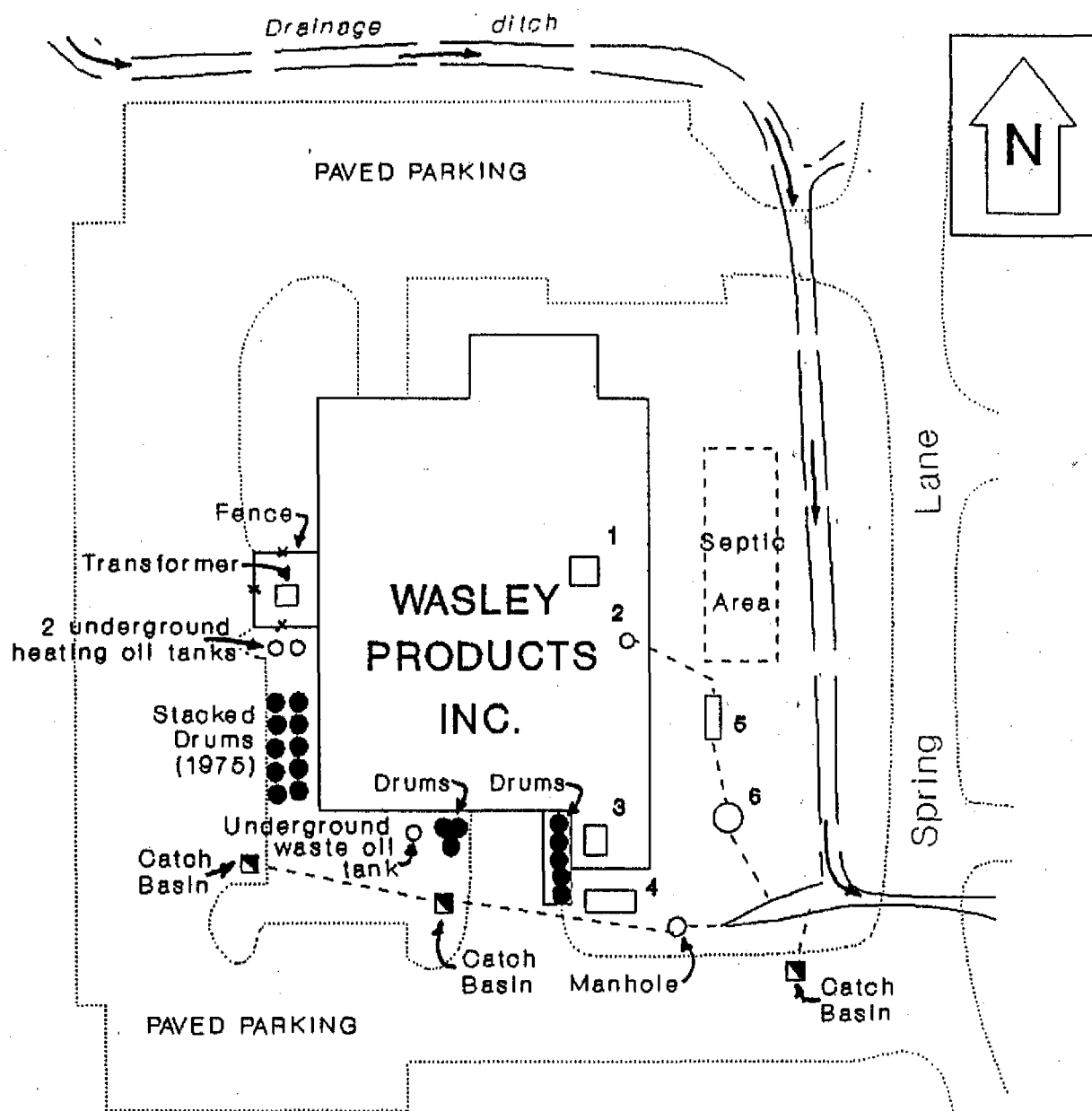
(VII.1,2)

Wasley has been operating at its present location for the past 27 years manufacturing seals for ball & roller bearings, parachute ripcords, lighting fixtures, rubber molded goods, and metal stampings (II.3,4,5,6). Manufacturing processes include milling, molding, cleaning, painting, drilling, tube forming, deburring, induction welding, extruding, swaging, pressing, soldering, brite dip washing, steel blanking, bonding, Zn-phosphating, etching, & adhesive coating (II.3,4,5,6). Resulting wastes include cutting oils, cooling water, alkaline phosphate oakite solution, black oxide salt soap etching solution, lacquers, paint pigments, black oxide, oakite "31", Mi-Phos Z-2, Methyl Ethyl Ketone (MEK), methanol base coating, oakite "stripper", spent adhesive, and scrap metal (II.3,4,5,6).

An inspection conducted by the Connecticut Department of Environmental Protection (CT DEP) on February 2, 1967 reported that industrial wastes were being discharged to two locations; an open ditch and a septic tank and drywell system. Reportedly, in 1970, industrial wastes from the Brite Dip Room were being discharged to a brook (II.4). The Brite Dip Room floor drains were dye tested (Figure 2). The results were positive in the stream within 10 minutes (II.4). On November 16, 1970, it was reported that the septic system was failing and overflowing on the surface in the front of the property. However, according to a representative of the Farmington Engineering Office, Wasley did not connect to the municipal sewer system until some time between mid-1975 and mid-1976 (VII). Information regarding the current status of the septic system and drywell could not be found.

A site analysis of aerial photographs of the FIP area taken April 10, 1975 was conducted by the U.S. Environmental Protection Agency (EPA). This analysis reported that 60-65 drums were being stored along the west side of the Wasley building (Figure 2) (III.1). There was also an area of associated ground staining. Analysis of aerial photographs of the FIP area taken April 13, 1980, reported the drums had been removed, but the ground staining was still visible (III.1).

A composite sample of effluent from Wasley's finishing room was taken on June 4 - June 5, 1975. The sample, taken from the septic tank, was collected and analyzed by Engineered Environments of Waterbury, Connecticut. The laboratory results showed concentrations of 7 milligrams/liter (ppm) Hexavalent Chromium, 8 ppm total Chromium, and 5.2 ppm Copper (Attachment D).



KEY

- 1 - Rinse tank
- 2 - Floor Drain
- 3 - Chemical Storage
- 4 - MEK Storage Tank
- 5 - Septic Tank
- 6 - 6'x 6' Drywell

SITE SKETCH **WASLEY PRODUCTS, INC.** Spring Lane Plainville, Connecticut

NOT TO SCALE

FIGURE 2

In May, 1975 Wasley reportedly discharged an unknown quantity of untreated acid to the environment (Attachment E). The discharge was reportedly originating from the rear of the Wasley building and was part of the cooling water discharge stream (II.12). On-site testing by the CT DEP with litmus paper showed the pH of the discharge to be 2 (II.12). A sample of the discharge was collected by the CT DEP. Laboratory analysis of the discharge sample showed the following concentrations:

<u>INORGANIC</u>	<u>CONCENTRATION</u>
Copper	173 milligrams/liter (ppm)
Zinc	57 ppm
Chromium (hex)	640 ppm
Chromium (total)	940 ppm
Cadmium	0.1 ppm
Nickel	0.2 ppm
Total Organic Carbon (TOC)	80 ppm

(II.17)

On March 15, 1976 Wasley was issued NPDES Permit No. CT0022659 to discharge wastewaters to a tributary of the Pequabuck River. On April 30, 1976 the company was issued State Permit No. SP0000150 (DEP/WCU No. 110-048) to discharge process rinsewater to the town of Farmington sewerage system. The permits expired on March 15, 1981 and April 30, 1981, respectively (II.7,8). Applications for reissuance of the NPDES and state permits were submitted to the CT DEP on July 9, 1987 and September 8, 1987, respectively. A public notice calling for comments concerning the reissuance of Wasley's permits was issued for publication on October 2, 1990. No permits have been reissued. Wasley has been submitting monthly discharge monitor reports to the CT DEP in accordance with the requirements of their expired permit. A summary of wastewater parameter exceedances reported in 1990 can be found in Attachment F.

In their application for a process wastewater discharge permit, Wasley reported toxic or hazardous substances which are on site. The following substances are anticipated to be used or are present in a raw, intermediate, final product or by-product:

Toluene	Methylene Chloride
Methyl Ethyl Ketone	Sodium Hydroxide
Hydrochloric Acid	Phosphoric Acid
Formic Acid	Phenol
Sodium Nitrate	Silver Nitrate
Sulfuric Acid	

(II.18)

Nickel and Chromium are listed as metal additives anticipated to be present in a raw material and final product (II.18).

Wasley has four underground storage tanks on the property (I.2.a). Three oil tanks and one chemical (MEK) tank (Figure 2). Two 4,000 gallon heating fuel #2 oil tanks were installed in June, 1963. One 2,000 gallon waste oil tank was installed in December, 1978. These three oil tanks are reportedly all currently being used and have a life expectancy of 15 years from the date they were installed. The two 4,000 gallon tanks have exceeded their life expectancy, by 13 years. Staining was observed on the ground surface around a waste oil collection pipe by a CT DEP field inspector during an inspection conducted on July 6, 1983 (II.5).

The fourth tank is a 2000 gallon underground steel storage tank for virgin MEK which was installed in December, 1978. The tank has a life expectancy of 15 years from the date it was installed. The MEK is pumped from the tank to the Chemical Storage Room where it is discharged into 5 gallon buckets and mixed with adhesive. The room is isolated by spill retention troughs (II.11). Reportedly there are no floor drains located in the Chemical Storage Room and no catch basins located near the underground tank or transfer area (II.11). Waste MEK is stored in 55 gallon drums (II.11). Waste MEK is manifested off-site by a licensed hauler and reportedly disposed of at a RCRA disposal facility.

On 8/18/80 Wasley notified under RCRA as a Small Quantity Generator (SQG) of hazardous wastes such as Toluene, MEK, and other non-halogenated solvents. In 1980, industrial waste oils, MEK, and a water/zinc mixture reportedly were being manifested off-site by licensed haulers (III.2). Other industrial wastes were being sent untreated to the municipal sewers.

In a letter from the CT DEP to Wasley summarizing a meeting of February 16, 1986, it was stated that the company would be required to either submit an annual report of concentrations of Total Toxic Organics (TTO) in their processing water or submit a Solvent Management Plan (SMP) for approval by the CT DEP. The company chose to submit a SMP. The plan was submitted to the CT DEP for approval on July 5, 1989.

The SMP prepared for Wasley by EEW Management, Incorporated described the TTO's used by the facility, their method of disposal and storage, and spill prevention procedures. A list of TTO's used within the facility can be found in Table 2. Adhesives having a MEK base are the primary materials used. However, MEK base adhesives were not included in the facility's list of TTO's because they are not a federally listed TTO (II.11). The plan also included a diagram showing all storage areas, floor drains, and spill prevention provisions, including a description of shipping and receiving areas (Attachment G). Waste chemicals are stored in the Chemical Storage area in containers (II.11). These containers vary in size from 5 gallons to 55 gallons.

According to the SMP, the metal cleaning operation includes a mild, alkaline soap, an acid etch, a Zinc bath, an Iron bath, and a rust preventive dip. Rinsewaters generated by this process contain Aluminum, Chromium, Copper, Iron, and Zinc (II.11). These rinsewaters are discharged to the municipal sanitary sewer system. Alkaline soap and rust preventive were previously discharged in this manner. However, this was a violation of Wasley's state discharge permit. Currently these wastes are placed in containers and disposed off-site. The Zinc bath, Iron bath, and acid etch solutions are replenished as needed; the solids are removed from the solutions periodically, placed in drums, and disposed off-site by a licensed waste hauler (II.11).

TABLE 2
Total Toxic Organic Compounds used by the facility

<u>CHEMICAL</u>	<u>TOTAL TOXIC ORGANIC</u>	<u>LOCATION</u>
3-36 (Aerosol)	1,1,1 Trichloroethane 29%	Ripcord Stock room Tool Room Maintenance Secondary Rubber Mold
Anti-seize Lub. (Aerosol)	Methylene Chloride 60-65%	Stock Room Tool Room; Lab
Blacothane	1,1,1 Trichloroethane (TCA)	Rubber Stock Chem Storage; Lab
Chemlok 205	Carbon Tetrachloride <1%	Insert Prep Dept.
Chemlok 218	Toluene 27%	Lab
Chemlok 220	Tetrachloroethylene (TCE) 5%	Lab
Chemlok 220E	TCE 35%; Toluene 10%	Lab
Chemlok 233	TCE 40%	Lab
Chemlok 234B	TCE 25%	Insert Prep Dept. Chem Storage; Lab
Chemlok 235	TCE 25%	Lab
Chemlok 236A	TCE 25%	Lab
Chemlok 250	TCE 35%	Lab
Chemlok 252	TCA 50%; Toluene 10% Tetrachloroethylene (PCE) 10%	Insert Prep Dept. Chem. storage
Chemlok 253	1,1,1 Trichloroethane (TCA) Toluene 25%; PCE 10%	Lab
Chemlok 412	TCE 60%	Lab
Chemlok AP 134	Toluene 75%	Lab
Chemlok Y4310	Toluene <0.5%	Insert Prep Line
Chloroethene SM Solvent	TCA	Chem Storage
DI n-Butyl Phthalate	DI n-Butyl Phthalate	Lab

TABLE 2 (continued)

<u>CHEMICAL</u>	<u>TOTAL TOXIC ORGANIC</u>	<u>LOCATION</u>
Dry Film Lub. #6075	TCA 51-90%	Lab
Dry Graphite #8078	Toluene 1-10% Methylene Chloride 51-70%	Stock Room Tool Room
Durez 012687	Phenol 1-3%	Insert Prep Line
Fel-Pro C5-A High Temp Anti Seize Aerosol	TCA 50-70%	Rubber Mold Stock Room
Frekote 33H	Methylene Chloride 27%	Insert Prep Line Rubber Mold Chem Storage; Lab
Methylene Chloride	Methylene Chloride	Rubber Mold Chem Storage; Lab
Mold Release CT-71	TCA 71%	Lab
Mono-Coat C-7, E30 E43, E63, H-7, XPM-31	Methylene Chloride 70% 1,1,2-Trichloroethane	Lab
Mono-Coat E76	Methylene Chloride 70% 1,1,2-Trichloroethane	Rubber Mold Chem Storage
Oakite Stripper DE	Methylene Chloride 70-80%	Lab
Oakite Stripper EPA	Methylene Chloride 65%	Chem Storage
Oakite Stripper EZ	Methylene Chloride 45%	Lab
Oakite Stripper FPF	Methylene Chloride 70%	Lab
Oakite Stripper SA	Methylene Chloride 85-95%	Lab
Oakite Swift	TCA >95%	Lab
Perchlorethylene	Tetrachloroethylene	Chem Storage
Permanant TFE Coating #6065	Toluene 1-10%	Lab
Rapid Tap	TCA 80%	Maintenance
Rust Inhibitor	TCA 50%	Lab

TABLE 2 (continued)

<u>CHEMICAL</u>	<u>TOTAL TOXIC ORGANIC</u>	<u>LOCATION</u>
8770 Safety Solvent	TCA	Chem Storage; Lab
8270 Solvent Cleaner	Methylene Chloride 30-40% PCE 8-10%	Chem Storage
8221 Solvent Wipe	PCE 30-40%	Lab
Thixon 508	Toluene 78%	Lab
Thixon 718	Toluene 20%; Phenol <1%	Insert Prep Line
Thixon 824	Toluene 52%	Insert Prep Line Chem storage; Lab
Thixon OSN-2	Toluene 22%	Lab
Toluene	Toluene 100%	Insert Prep Line Chem Storage; Lab
Type R	PCE 31%; TCA	Lab
UCD 1507AU	Ethyl Benzene 10%	Chem Storage; Lab
UCD 4800AU,5150AU 5773AA,6004AU 7959AU	Ethyl Benzene 10%	Lab

Source: EEW. 1989. Solvent Management Plan prepared For Wasley Products, Plainville, Connecticut.
EEW Management, Inc. Torrington, Connecticut. July 5.

Water samples were collected from the sanitary sewer discharge by the CT DEP on February 19, 1988 (VI.5). The Connecticut Department of Health Services (CT DOHS) laboratory reported concentrations of 7 ppb Trichloroethylene (TCE), 4 ppb 1,1,1-Trichloroethane (TCA), and 3 ppb Tetrachloroethylene (PCE). The laboratory also reported 0.01 ppm Cadmium (Cd) and 0.07 ppm Lead (Pb). On February 24, 1988 CT DEP sampled wastewater from Wasley's rinsewater tank discharge (II.6). The CT DOHS laboratory reported concentrations of 6 ppb TCE, 5 ppb TCA, 4 ppb PCE, and 280 ppb Methyl Ethyl Ketone (MEK) (Attachment J).

On March 25, 1988 Wasley was issued Order WC4676 (Attachment I). This order required Wasley to:

- I. Install resource conservation devices and implement resource conservation practices as necessary to comply with Sections 22a-430-3(o) of the regulations of Connecticut State Agencies including, but not limited to, water conservation, resource recovery, waste recycling, water reuse, and material or product substitution.
- II. Install wastewater treatment facilities or process modifications as necessary to ensure compliance with State Permit No. 110-048 after implementation of the resource conservation measures required by paragraph I above.

(II.10)

Wasley was to accomplish the above in accordance with a specified schedule and to the satisfaction of the Commissioner of the CT DEP. This order has not been complied with to the satisfaction of the Commissioner of the CT DEP.

On October 11, 1988, Wasley's non-compliance with the requirements of State Permit No. 110-048 was addressed by the CT DEP. Wasley was reporting a rinsewater flow rate of 8,000 gallons per day (gpd); twice the permitted flow rate of 4,000 gpd. Average daily concentrations of Aluminum and Iron in the rinsewater exceeded two times the permitted level of 2 milligrams/liter (ppm) (II.14). Concentrations of Zinc in the rinsewater discharge also exceeded its permitted level of 2 micrograms/liter (ppb). These non-compliances were addressed by the CT DEP by setting Total Toxic Organic limits to Wasley's processing water, requiring a description of Wasley's water conservation practices, and requiring an analysis of Wasley's wastewater discharges (II.14).

Prior to 1989, concentrated solutions from the cleaning line were being discharged to rinsewater drains. In a letter dated July 11, 1989 from Wasley to CT DEP, Wasley stated "Concentrated solutions from the cleaning line are no longer discharged to the drain". Wasley reported that action had been taken which allows the rinsewater to settle prior to discharge. The sludge generated by this settling process is removed from the drains and stored in drums for future disposal off-site (II.15).

On July 26, 1989, International Technologies Corporation personnel were drilling on the Wasley property for the purpose of collecting soil samples. During the drilling operation a sanitary sewer lateral was broken (II.19). At that time only alkaline cleaner, non-contact cooling water and sanitary sewerage were reportedly being discharged to the sanitary sewer system. Two samples of wastewater were collected by the CT DEP from the pipe discharge which accumulated in the bore hole (II.19, VI.4). CT DOHS laboratory analysis of the samples showed concentrations of 7 ppb TCA and 2 ppb PCE (Attachment J).

On July 31, 1989 a groundwater sample from monitor well A was collected by the CT DEP (VI.4). On August 1, 1989 groundwater samples were collected by the CT DEP from monitor well C and two unlabelled monitor wells (VI.4). The location of the monitor wells is unknown. There are no references to monitor wells in any other file information which was located. All samples were analyzed by the CT DOHS laboratory. The CT DOHS laboratory reported concentrations of 8 ppb TCE and 8 ppb TCA for the monitor well A sample. The laboratory reported concentrations of 0.01 ppm Cd, 0.21 ppm Chromium (Cr), and 0.08 ppm Pb for monitor well C sample (Attachment J).

On October 2, 1990 CT DEP conducted a NPDES compliance inspection of Wasley Products, Inc. (Attachment K). During the inspection the following areas were reported as unsatisfactory: facility site review, effluent/receiving waters, and self-monitoring program. A sample of wastewater from the collection pit located in the Insert Prep Department was collected by CT DEP (II.9). The CT DOHS laboratory reported sample concentrations of 18 milligrams/liter (ppm) Zinc, 20 ppm Tin, 48 ppm Iron, and 140 ppm suspended solids. These concentrations exceed those which are allowed under Wasley's former NPDES permit and also the limits presently listed in the draft permit (II.9). Reportedly, the solids are scooped from the bottom of the pit every three to four months. These solids, as well as, the sludge from the bottom of the solution tanks are stored in 55 gallon drums in the Insert Prep Department (II.9). In October, 1989 it was reported that no sludge had yet been transported off-site for disposal (II.16).

A perimeter survey of Wasley was conducted on April 25, 1991. During this survey 5-8 drums were observed on the loading dock on the south side of the building. There were also 2-3 drums stored on the bare ground across from the loading area (Figure 2). The contents, labelling, and condition of the drums could not be determined.

ENVIRONMENTAL SETTING

The land use in the FIP area is predominantly industrial with some residential, commercial, and agricultural areas (VIII). The topography is defined by gently sloping hills in the center of a northeast trending valley (V.9).

The overburden in the FIP area consists of stratified glacial outwash deposits that are characteristic of a kame terrace. This material generally contains reddish-brown sands and gravels with occasional clay lenses. In the FIP area these surficial materials have been reported to contain light-colored drift that is deposited on top of a ground-moraine. This ground-moraine is reported to be exposed in the vicinity of Scott Swamp Brook, between Scott Swamp Road (a.k.a. Route 6) and Hyde Road (V.5). Well construction log data from FIP wells #3 and #4 indicate clay lenses up to 48 feet thick near the ground surface overlying coarse sands and gravels (I.1.a). The depth to bedrock in the FIP area varies from 12 feet in the north along Scott Swamp Road to over 300 feet in the east near the Pequabuck River along Hyde Road (V.4). The glacial outwash materials fill a bedrock channel carved out of the soft New Haven Arkose sandstone between more durable basalt ridges to the east and west. The New Haven Arkose is a pale reddish-brown to grayish-red, interbedded coarse to fine-grained sandstone which may be more than 3,000 feet thick throughout the formation (V.4).

This central region of Connecticut contains several large fault zones that strike approximately N 50° E, with dip angles near vertical. One fault zone bisects the Industrial park just north of Johnson Avenue in Farmington, Connecticut. A large, closed bedrock depression has been mapped as extending as far south as Southington, Connecticut, and as far north as Poplar Swamp in Farmington, Connecticut, and is east to northeast of the FIP area. The base of this depression is approximately 150 feet below mean sea level and as much as 340 feet below the Pequabuck River (V.4). The deepest portions of the depression are located at the point where Route 6 passes over the Pequabuck River. The Wasley site is at an elevation of approximately 205 feet above mean sea level (V.9).

Surface water runoff from the FIP area is generally to the southeast towards Scott Swamp Brook which feeds the Pequabuck River. Catch basin collection systems from parking lots and landscaped lawns also drain into these waterways (I.1.a). Surface water runoff flows generally to the east into a drainage ditch which flows approximately 1000 feet into Scott Swamp Brook (V.9, VIII). Scott Swamp Brook flows east approximately 0.7 stream miles from the point at which it exits the FIP to its confluence with the Pequabuck river. Scott Swamp Brook is designated as Class B/A surface water (V.13). The Pequabuck River is classified as D/B_c from the town of Bristol to its confluence with the Farmington River (V.13). The Pequabuck River, from its confluence Scott Swamp Brook, flows north approximately 3 stream miles into the Farmington River. From this junction, the Farmington River flows northeasterly until it joins the south-flowing Connecticut River over 15 stream miles away (V.7,8,9,10,11). The Farmington River is designated as Class B_{bc} surface water (V.13). The Connecticut River is Class C/B surface water (V.13). There are no drinking water intakes along the surface water pathway from Scott Swamp Brook to the Connecticut River (V.15, VI.6). The Pequabuck River is used for boating and fishing and the Farmington River is used for fishing and swimming (I.1.a). For complete water quality classification descriptions refer to Attachment C.

Three surface water samples of Scott Swamp Brook were collected by a CT DEP field Inspector on 9/24/87. The sample locations could not be determined from file information. The Connecticut Department of Health Services (CT DOHS) laboratory analysis showed high concentrations of chlorinated solvents (VI.3). The highest concentrations reported were 860 micrograms/liter (ppb) Trichloroethylene (TCE), 950 ppb 1,1,1-Trichloroethane (TCA), and 14000 ppb Tetrachloroethylene (PCE) (Attachment H),

According to the CT DEP Natural Resources Center, Shade Swamp is a critical wetland habitat (I.1.a). It is located along the Pequabuck River approximately 2 miles downstream of its confluence with Scott Swamp Brook.

Based on the DEP Natural Diversity Database maps and files, the following endangered or threatened species and species of special concern occur within a 4-mile radius of the FIP:

<u>Species</u>	<u>Date Last Observed</u>	<u>Proposed State Status</u>	<u>Federal Status</u>
<i>Platanthera dilata</i>	1900	Special Concern	
<i>Dicentra canadensis</i>	1987	Threatened	
<i>Lygodium palmatum</i>	1917	Special Concern	
<i>Aplectrum hyemale</i>	1897	Special Concern	
<i>Agalinus acuta</i>	1897	Endangered	Endangered
<i>Vitis novae-angelia</i>	1979	Special Concern	
<i>Hydrophyllum virginianum</i>	1979	Special Concern	
<i>Dryopteris goldiana</i>	1910	Threatened	
<i>Polygala nuttallii</i>	1900	Endangered	

(V.12)

Natural Diversity Database Information includes all information regarding critical biological resources available to the DEP Natural Resources Center at the time of the request. This information is a compilation of data collected over the years by the Natural Resource Center's Geological and Natural History Survey and cooperating units of DEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations.

Reportedly the groundwater in the vicinity of the FIP area mimics the surrounding topography and flows in a southeasterly direction (I.1.a). However, groundwater flow may be affected by the FIP and Johnson Avenue wells, since the wells have a radius of influence which encompasses the FIP area (I.1.a). Groundwater in the FIP area is mapped as Class GB/GA (V.13). The area immediately surrounding the public water supply wells in the FIP is mapped as Class GAA (V.13). A classification of GAA describes groundwater that contributes water, via groundwater flow, to a public water supply well (see Attachment C). The groundwater beneath the area of the Johnson Avenue and Hyde Road junction is at least partially confined by a 20 to 100 foot thick surface layer of swamp deposits. The Johnson Avenue wells draw water from a coarse gravel layer approximately 20 feet thick that lies approximately 110 feet beneath the ground surface. The area west of Scott Swamp Brook serves as the primary recharge zone for the deep gravel deposits (I.1.a).

The two Johnson Avenue wells and the four FIP wells along Hyde Road are the nearest community well supplies which have reported contamination. These six high yield wells are screened in overburden materials at depths of 72 to 110 feet below the ground surface and serve approximately 9,345 people (I.1.a, IX.2). The two Johnson Avenue wells (#3, #6) are owned and operated by the Plainville Water Company (PWC) and serve approximately 3,645 people (IX.2). Johnson Avenue well #6 is being pumped and discharged into Scott Swamp Brook with permission from the CT DEP in an effort to reduce the trichloroethylene (TCE) contamination in nearby Johnson Avenue well #3 (VI.2, IX.2). Johnson Avenue well #3 is currently being monitored monthly and Johnson Avenue well #6 is being monitored weekly for volatile organic compounds (VOC). The four FIP wells are owned and operated by the Unionville Water Company (UWC). The FIP wells serve approximately 5,700 people. Well #4 is currently in use and being monitored monthly for VOCs (IX.3). If water pressure drops below a minimum level, wells #3, #2, and #1 are brought on-line, respectively, as needed (IX.3).

The FIP and Johnson Avenue wells are known to have contamination since 1975 (I.1.a). The predominant compounds detected in the groundwater are TCE, TCA, PCE, and chloroform. A summary of historical well monitoring data can be found in Attachment B Tables 1-3.

According to a representative of the Unionville Water Company in Farmington, an application for a well water diversion permit has been submitted to the CT DEP. A groundwater study is presently being conducted by a water company contractor, Groundwater, Inc., as part of this permit application. The study will include an analysis of the effects of the wells on groundwater flow patterns within the area of influence of the wells (IX.3). The radius of influence encompasses the FIP area.

Table 3 lists community groundwater supply wells within a 4-mile radius of the FIP area as reported in the 1986 CT DEP "Directory of Community Water Systems in Connecticut". A summary of known industrial wells within a 1-mile radius of the FIP area can be found in Attachment A. There are no known private drinking water wells still in use in the FIP area (I.1.a, VI.2). Public water is now being supplied. For approximate locations of community and industrial wells within 1 mile of the FIP area refer to Figure 3.

Municipal sanitary sewers were introduced into the FIP area in the early 1970's (VII). Most of the industrial sites within the FIP area currently discharge sanitary and industrial wastewaters to the municipal sanitary sewer system.

The following cities/towns and their populations are located within a 4-mile radius of the FIP area (V.7,8,9). Only small portions of Burlington, New Britain, Southington, and Unionville and their populations are within the 4-mile radius.

<u>City/Town</u>	<u>Population</u>
Bristol	57,426
Burlington	5,466
Farmington	11,299
Unionville	11,424
New Britain	73,903
Plainville	17,500
Southington	<u>27,992</u>
Total	205,010

(IX.4)

TABLE 3

Groundwater Supply Wells Within 4 Miles of The FIP Area

<u>Well</u>	<u>Ownership/Use</u>	<u>Approximate Distance/Direction</u>	<u># of Wells</u>	<u>Population Served</u>	<u>Screened Interval</u>
Johnson Ave. A	Plainville Water Co./ Community and Industrial	<.10 E	2	3,645	overburden
FIP B	Unionville Water Company/ Community and Industrial	<.10 E	4	5,700	overburden
Wells Acre C	Unionville Water Co./Community	.80 NW	1	244	bedrock
Cope Manor	Private/Community	1.4 SW	1	84	bedrock
Winthrop Drive Duplexes	Private/Community	1.4 NW	1	unknown	unknown
Woodford Ave.	Plainville Water Co./ Community	1.8 SE	2	10,935	unknown
Farmington Res.	Unionville Water Co./ Community	2.5 NE	2	11,000	unknown
White Bridge	New Britain Water Dept./Community	2.5 W	2	18,135 (mixed with surface water)	unknown
Mix Street	Bristol Water Dept./ Community	2.5 & 2.9 W	4	52,328	overburden
Angelo Tomasso, Inc.	Private/Community	2.9 SE	3	unknown	unknown
Lakeview Apts.	Unionville Water Co./ Community	2.9 N	2	642	bedrock
Farmington Line West Association	Private/Community	3.2 NW	1	51	unknown
Woodcrest Association Inc.	Private/Community	3.2 NW	1	60	unknown

Forest Hills Mobile Home Park (Jensens)	Private/Community	4.1 SSW	3	380	unknown
No. 1 & No. 2	Unionville Water Co./ Community	4.8 N	2	2,500	unknown

NOTE: The above information was obtained from the CT DEP 1986 "Directory of Community Water Systems in Connecticut", publication. The distances have been measured from a central point located within FIP. This central point was determined by drawing a circle of smallest circumference that completely enclosed all the properties included as part of the FIP investigation, and, using the center of this circle as the center of the Farmington Industrial Park Area. Wells identified with a letter are wells located within a 1 mile radius of the FIP center and correlate with information in Attachment A (Figure 3).

- ⊕ = Screened in bedrock
- ⊕ = Screened in overburden
- ⊙ = Screened interval unknown
- ⊖ = Abandoned well (overburden)
- = Abandoned well (bedrock)



BASE MAP IS A PORTION OF THE FOLLOWING 7.5' U.S.G.S. QUADRANGLE(S):
NEW BRITAIN, CT. 1966, PHOTOREVISED 1984; BRISTOL, CT. 1966, PHOTOREVISED 1984.

COMMUNITY AND INDUSTRIAL WELLS
WITHIN 1 MILE OF THE FIP CENTER

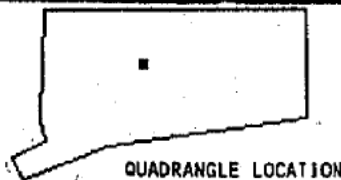


FIGURE 3

The following table is an estimate of private well users within each specified distance ring.

PRIVATE WELL USERS

<u>Radial Distance from Wasley Products, Inc. (Miles)</u>	<u>Approximate Population Served by Private Well</u>
0.00 - 0.25	0
0.25 - 0.50	0
0.50 - 1.00	500
1.00 - 2.00	1,378
2.00 - 3.00	2,571
3.00 - 4.00	<u>4,207</u>
Total	8,656

(V.7,8,9; IX.4)

In November, 1982 the CT DEP met with thirteen companies located within the FIP (I.1.a). The CT DEP requested that the companies conduct a groundwater study in a collective effort. The study was not a requirement of a DEP administrative enforcement action. Due to the unwillingness of some of the companies to participate, the study was never conducted.

CONCLUSIONS AND RECOMMENDATIONS

Wasley Products, Inc. has been operating at its present location for 27 years. Wasley has been operating for approximately 10 years under an expired NPDES and State discharge permits. In 1967, Wasley was discharging industrial wastes into an open ditch and a septic tank/leach field and drywell system. The facility connected to the municipal sewer system around 1975-1976. Analysis of wastewater discharge and monitor well samples collected from the Wasley property since 1975 have shown contamination exceeding the amounts allowed by state and federal drinking water standards. Of particular concern are groundwater samples collected in 1989. These samples showed concentrations of 8 ppb TCE and 8 ppb TCA. Wasley was issued an order in 1988 to install wastewater treatment facilities, install resource conservation devices and implement resource conservation practices. This order has not been complied with to the satisfaction of the CT DEP Commissioner.

The CT DEP has been investigating groundwater contamination associated with the FIP and Johnson Avenue wells. Wastes generated by Wasley, in particular TCE and TCA, are of concern. The predominant contaminants found in the wells are TCE, TCA, PCE, and Chloroform. Further on-site sampling and laboratory analysis are needed in order to assess the threat posed by Wasley to the environment and public health. Therefore, the CT DEP recommends continued investigative work under CERCLA.

REFERENCES

I. CT DEP Waste Management Bureau

1. Site Remediation and Closure Division Files
 - a. Final Screening Site Inspection, Mott Metallurgical Company. 8/2/90.
2. Oil & Chemical Spill Division Files
 - a. Underground Storage Tank Notification form. 4/21/86.
3. Waste Engineering & Enforcement Division Files
 - a. Small Quantity Generator Reports. 1985, 1988, and 1989.

II. CT DEP Water Management Bureau Files

1. Letter Minges Environmental Laboratory to Roys Machinery & Sales. RE: Purgeable organics survey from wells along New Britain Avenue. 4/5/83.
2. TRC Environmental Consultants. Hydrogeologic Investigation Report - Connecticut Spring & Stamping Corp. 9/28/88.
3. P-5 Inspection Report. Conducted by W. O'Brien. 2/2/67.
4. P-5 Inspection Report. Conducted by R.W. Senack. 11/16/70.
5. Industrial Survey Report by C. Ready. 7/6/83.
6. Industrial Survey Report by T. Beaulieu. 2/24/88.
7. NPDES permit. 3/15/76.
8. State Discharge permit. 4/30/76.
9. NPDES Compliance Inspection Report. Conducted by R. Langan. 10/2/90.
10. Pollution Abatement Order No. WC4676. 3/25/88.
11. Solvent Management Plan. Prepared by EEW Management, Inc. 7/5/89.
12. Memo from E. Pizzuto to R. Smith. RE: Discharge of untreated acid - Wasley Products, Plainville. 5/30/75.
13. Letter from EEW Management, Inc. to C. Yario. RE: Response letter to proposed sampling procedures. 10/30/90.
14. Letter from C. Yario to R. Leferriere. RE: Summary of 2/16/88 meeting. 10/11/88.
15. Letter from R. Leferriere to C. Yario. RE: Response to C. Yario's 10/11/88 letter. 7/11/89.
16. Letter from R. Leferriere to C. Yario. RE: Response to C. Yario's 8/16/89 letter. 10/10/89.

REFERENCES (continued)

17. Letter from Engineered Environments to R. Mason. RE: Labb results from effluent sample. 6/9/75.

18. Application for a Discharge Permit. 9/87.

19. Memo from R. Melvin to file. RE: Wasley groundwater history. 7/31/89.

III. U.S. EPA.

1. Site Analysis Farmington Industrial Park. TS-PIC-90009. June 1990.

2. Notification to EPA of Hazardous Waste Activities. Pub. No. 897.1. 12/80.

IV. Federal Register Vol. 48. No. 137. 7/15/83.

V. CT DEP Natural Resources Center

1. Atlas of Public Water Supply Sources and Drainage Basins of Connecticut. 6/82.

2. Directory of Community Water Supplies in Connecticut. 8/86.

3. Community Water Systems in Connecticut, a 1984 Inventory. CT Natural Resources Center. 1986.

4. Bedrock Map, New Britain Quadrangle. USGS Map MF-523C. 1975.

5. Surficial Geology Map, New Britain Quadrangle. USGS Map GQ-119. 1959.

6. Hydrogeologic Data for the Farmington River Basin. Connecticut Water Resources Bulletin No. 28. 1975.

7. USGS Topographic Map, Avon Quadrangle. 1957. Photorevised in 1984.

8. USGS Topographic Map, Bristol Quadrangle. 1966. Photorevised in 1984.

9. USGS Topographic Map, New Britain Quadrangle. 1966. Photorevised in 1984.

10. USGS Topographic Map, Windsor Locks Quadrangle. 1966. Photorevised in 1984.

11. USGS Topographic Map, Hartford North Quadrangle. 1966. Photorevised in 1984.

12. Memo N. Murray. RE: Natural Diversity Database. 1/25/91.

13. Water Quality Classification Map of Connecticut. 1987.

14. Federal Emergency Management Agency. Floodway Flood Boundary and Floodway Maps. Farmington, CT. July 17, 1986.

15. Telecon M. Blais (CT DEP) with H. Sternberg (CT DEP). RE: Surface water intakes. 6/91.

REFERENCES (continued)

VI. CT Department of Health Services

1. Letter L. DeJong (BHC) to M. Hage (DOHS). RE: Plainville Water Co., Gros-lte Industries, Inc.
2. Telecon S. Tartaris (CT DEP) with J. Czaja (DOHS). RE: Current Well Status. 2/6/90.
3. Laboratory results of Scott Swamp Brook surface water samples. Samples collected by R. Melvin. 9/24/87.
4. Laboratory sample analysis report. Samples collected by R. Melvin. 6/26/89, 7/31/89, and 8/1/89.
5. Laboratory sample analysis report. Samples collected by R. Senack & T. Beaulieu. 2/19/88.
6. Telecon M. Blais (CT DEP) with P. Scully (DOHS). RE: Surface water intakes. 6/91.

VII. Plainville Town Hall

1. Tax Assessor's Records
2. Plainville Land Records

VIII. Perimeter Survey conducted on 4/25/91.

IX. Other

1. Telecon S. Tartaris (CT DEP) with J. Peska (New Britain Water Dept.). RE: Current status of White Bridge Well. 8/20/91.
2. Telecon S. Tartaris (CT DEP) with M. Picone (Plainville Water Co.). RE: Current status of Woodford Avenue & Johnson Avenue Wells. 8/20/91.
3. Meeting with representative of Unionville Water Company. 2/91.
4. U.S. Dept. of Commerce Bureau of the Census. 1990 Census. April 1991.

ATTACHMENT A

KNOWN PRIVATE INDUSTRIAL WELLS WITHIN A 1 MILE RADIUS OF THE FIP CENTER

ATTACHMENT A
KNOWN PRIVATE INDUSTRIAL WELLS WITHIN A 1 MILE RADIUS OF THE FIP CENTER

<u>Company Name</u>	<u>Date Well Constructed</u>	<u>Depth</u>	<u>Yield</u>	<u>Well Status</u>	<u>Sampling Conducted</u>	<u>Investigating Organization</u>
Mott Metallurgical Co. (1) D	1968	160 feet	N/A	Never connected to building.	Yes	CT DEP-1989 NUS/FIT-1989
American Research (2) E	1956	632 feet	30 gpm @ 165 feet 75 gpm @ 632 feet	Town DOH ordered well plugged in 1988.	Yes	Minges Env.-1983 CT DEP-1983
Gros-ite/Whitnon-Spindle (2) F	1955	438 feet	Est. 60-85 gpm.	Not in use for 21 years. Well pumped to waste for 3 days before test by Minges.	Yes	Minges Env.-1983 CT DEP-1983
Connecticut Spring and Stamping (3) G	1979	330 feet	150 gpm.	Currently in use for A/C water; cooling and process water on emergency basis.	Yes	TRC Env. Consultants-1988
Roy Machinery (Woods Electrical) (2) H	1957-1958	24-26 feet	Less than 5 gpm.	Ordered not to use after sampling by NUS/FIT & CT DEP detected tetrachloroethylene in 1989.	Yes	Minges Env.-1983 NUS/FIT-1989 CT DEP-1989
Ken/M&A Construction (2) I	N/A	416 feet	N/A	In use	Yes	Minges Env.-1983 CT DEP-1989
Tri-D Corp (4) J	1966	280 feet	22 gpm.	N/A	N/A	N/A

Note: Letters following company name correlate with Figure 3.

REFERENCE:

- (1) NUS/FIT 1990
- (2) Minges. 1983
- (3) TRC. 1988.
- (4) CT DEP. 1975.

TABLE 2
UNIONVILLE WATER COMPANY/FIP WELL DATA

	TCA	TCE	PCE	CHC13
FIP Well #1				
6/2/75	ND	200	ND	20
3/28/88	63	4.6	3.8	
FIP Well #2				
6/2/75	ND	85	160	60
3/31/88	21	3.2	14	
FIP Well #3				
6/2/75	ND	36	73	97
1/16/80	18	1	5	ND
3/20/80	46	1.7	6.1	ND
4/1/80	46	1.4	8.2	ND
4/8/88	8.4	1.3	3.2	
2/28/90	6.9	1	1.6	
4/18/90	9.3	0.52	0.65	
FIP Well #4				
6/2/75	ND	53	640	77
1/16/80	18	1	74	ND
2/22/80	15	1.5	14	ND
2/29/80	25	1.7	20	1.8
3/4/80	13	1.7	17	ND
3/13/80	17	1.9	18	D
4/15/88	8.7	1.3	3.2	
3/28/90	6	1	2.4	
5/31/90	5.3	0.97	2.2	
6/27/90	8.4	1.3	2.2	
7/24/90	8.0	1.2	2.0	
8/31/90	11	1.0	1.4	
9/25/90	9.9	0.74	1.4	
2/8/91	8.5	0.97	1.5	ND

Concentrations reported in parts per billion (ppb)
 ND = Not Detected D = Detected, not quantified
 TCA = 1,1,1 Trichloroethane PCE = Tetrachloroethylene
 TCE = Trichloroethylene CHC13 = Chloroform

REFERENCES

Averill Environmental Laboratories, Inc. 1991. Laboratory Results, FIP Well # 4, Sample collected February 5.

Connecticut State Department of Health. 1990. Summary of Organohalides detected in FIP Wells #1, 2, 3, & 4. 1/5/87 - 9/25/90.

Connecticut State Department of Health. 1980. Laboratory Results, FIP Well #3, samples collected 1/16/80, 3/20/80, and 4/1/80.

Connecticut State Department of Health. 1980. Laboratory Results, FIP Well #4, samples collected 1/16/80, 2/22/80, 2/29/80, 3/4/80, and 3/13/80.

Connecticut State Department of Health. Laboratory Division. 1975. Report of Laboratory Examination. Samples collected from FIP Wells #1, 2, 3, & 4. June 2.

TABLE 3
Unionville Water Company/FIP Wells 3 & 4 (blend)

Date	TCA	TCE	PCE
1/3/83	29.5	0.6	3.4
2/1/83	22	0.9	5.6
3/1/83	36	0.6	5.3
4/4/83	23.8	0.9	5.3
5/2/83	22	1.8	4.7
6/1/83	13.3	4.2	19
7/6/83	36	6.5	14.5
8/2/83	38	2	5.1
9/1/83	72	4.4	192
10/3/83	101	4.7	6.25
11/1/83	89.5	3.1	5.9
11/14/83	42.6	2	1.7
12/5/83	34.6	1.3	5.2
1/3/84	35.2	1.9	2.7
2/1/84	23.9	1.6	4.8
3/1/84	15	ND	4.4
5/1/84	19.6	2	7.5
6/6/84	18.7	ND	4.4
7/2/84	31.6	1.2	1.8
8/1/84	46.3	4.5	2.5
9/4/84	28.1	3	3
10/1/84	20.5	2.7	1.1
11/1/84	40.5	ND	7.1
12/14/84	21.5	1.6	5.2
1/2/85	16.5	1	3.3
2/4/85	14	2.6	2.2
3/1/85	23.7	2.3	4
4/25/85	8.9	1.8	3.1
5/2/85	20.8	3	3.6
6/3/85	33	5.1	5.6
7/1/85	ND	ND	1.3
8/5/85	32.8	4.6	1.1
9/3/85	24.3	5.1	4.1
10/2/85	29.8	5.5	3
11/8/85	23.4	4.6	3
12/2/85	9.8	ND	ND

Concentrations reported in parts per billion (ppb)

ND = Not Detected

D = Detected, not quantified

TCA = 1,1,1 Trichloroethane

TCE = Trichloroethylene

PCE = Tetrachloroethylene

REFERENCE

Griswold and Fuss Environmental Laboratories, Inc. 1983 - 1985. Laboratory Results for samples collected 1/3/83 - 12/2/85. January 11, 1983 - December 11, 1985.

ATTACHMENT B

JOHNSON AVENUE AND FIP HISTORICAL WELL DATA

Table 1 - Plainville Water Company/Johnson Avenue Well Data

Table 2 - Unionville Water Company/FIP Well Data

Table 3 - Unionville Water Company/FIT Wells 3 & 4 (blend)

TABLE 1
PLAINVILLE WATER COMPANY/JOHNSON AVENUE WELL DATA

Date	Johnson Avenue Well #3			Johnson Avenue Well #6		
	TCA	TCE	PCE	TCA	TCE	PCE
1/14/86	30.9	3.8	4.7	3.3	11.7	ND
2/26/86	33	ND	ND	ND	23	3.9
3/17/86				1.6	18.4	ND
3/27/86	14.9	3.5	3.8	2.1	12.1	1.3
4/1/86	21.3	5.3	6.2	2.3	11.7	ND
4/18/86	28.4	ND	ND	ND	22.9	ND
5/14/86	36	2.5	3	2.3	13	ND
8/6/86	30.5	4.5	4.9	2.1	26.4	ND
12/22/86	53	5.2	14	7.6	9.8	5.8
2/10/87	23.9	2	12.7	ND	19.5	ND
3/10/87	24.6	2.4	15.2	ND	9.7	ND
8/11/87	16	2.2	4.5	3.8	19.3	2.2
10/6/87	16	ND	2.9	2	22	ND
12/1/87	23.6	2.9	6.8	2.1	21.4	ND
1/5/88	22.7	1.9	4.6	ND	19.5	ND
1/26/88	19.7	2.3	4.9	2.1	23.2	ND
2/22/88	16.2	ND	4.3	ND	18.1	ND
3/29/88	13.8	ND	3.9	ND	25.3	ND
4/19/88	2	24	ND	12.8	2	4.9
5/12/88	13.5	ND	4.1	ND	41	ND
6/14/88	17.2	2.1	5.5	2.5	28	ND
9/6/88				2.7	34.8	ND
10/4/88	17.9	2.4	6.2	4.5	2.6	ND
11/29/88	9.9	2	ND	2.5	21.6	ND
1/17/89	9.7	ND	ND			
1/24/89	3.8	1.6	ND			
1/31/89	11.8	22.6	10.2			
2/7/89	10.9	22.2	9.9			
2/14/89	9.4	9.9	4.3			
2/21/89	10.3	9.5	3.6			
3/14/89	10.9	2.2	4.2	2	18.5	ND
3/21/89	13	3.1	16.9	2.2	25.9	ND
5/16/89	14.3	2.1	4			
11/7/89	17.2	2.8	5.7	6.7	17.3	2.3
12/5/89	11.4	2.3	4.1	3.9	16.7	3.9
1/2/90	14.8	2.3	4.8	4.9	18.2	2.3
2/6/90	4.9	ND	1.4	4	12	1.8
2/13/90	11.8	2.1	3.6	3.6	15.3	1.7
2/20/90				7.8	28	3.5
3/6/90				4.8	14.5	2.6
3/13/90	12.6	1.7	3.1	3.6	11.2	1.8
3/20/90				4.9	14.1	2.5
3/27/90				4.7	15.0	2.5
4/3/90	21.0	4.8	4.6			
4/10/90				5.5	12.9	2.3
4/17/90				9.4	16.9	4.1
4/24/90				10.0	16.7	3.7
5/1/90	18.6	2.6	6.2	9.1	19.0	3.5
5/8/90				8.9	11.5	3.3
5/15/90	13.7	2.4	4.5	5.0	15.8	2.2
5/22/90				5.8	13.8	2.5
6/5/90				4.7	15.2	2.6
6/12/90	12.8	1.5	8.5	7.2	11.7	4.5
6/19/90				3.5	6.3	ND
6/26/90				2.6	7.3	ND
7/10/90	13.1	1.7	3.5	3.1	15.3	ND
7/17/90				2.1	12.3	ND

(continued on next page)

TABLE 1
PLAINVILLE WATER COMPANY/JOHNSON AVENUE WELL DATA

Date	Johnson Avenue Well #3			Johnson Avenue Well #6		
	TCA	TCE	PCE	TCA	TCE	PCE
7/24/90				5.5	53.5	6.4
7/31/90	22.0	3.3	6.8	4.3	49.8	4.4
8/7/90				3.0	30.2	2.2
8/14/90	19.0	3.3	17.2	ND	2.8	ND
8/21/90				3.8	30.5	2.5
8/28/90				3.3	30.4	3.2
9/4/90				4.4	42.5	3.6
9/11/90				ND	44.6	3.7
9/18/90	21.8	2.6	21.0	3.2	16.5	3.1
9/25/90				ND	41.2	3.7
10/2/90	16.0	3.0	ND			
10/9/90	13.6	2.1	4.8	4.0	16.4	1.0
10/16/90	10.0	ND	ND			
11/6/90	9.5	ND	ND			

Concentrations reported in parts per billion (ppb)

ND = Not detected

TCA = 1,1,1 Trichloroethane

TCE = Trichlorethylene

PCE = Tetrachlorethylene

REFERENCES

Connecticut Department of Health Services. 1989. Summary of Organohalides detected in Johnson Avenue Wells #3 & #6. 1/14/86 - 1/31/89.

Connecticut Department of Health Services. 1990. Summary of Organohalides detected in Johnson Avenue Wells #3 & #6. 12/22/86 - 11/6/90.